SOUTH CAROLINA ENVIRONMENTAL TRAINING CENTER

# Course Catalog







# Hwy. 378 SC Environmental Training Center and Workforce Development Advanced Manufacturing Technology Training Center To Florence SC Environmental Training Center and Workforce Development Site Building M600 Main Campus and M400 Building Miller Rd.

SCETC is located in the Advanced Manufacturing Technology Training Center at 853 Broad Street (Sumter, SC).

#### **Our Mission**

Central Carolina Technical College and the South Carolina Environmental Training Center are dedicated to providing quality training and technical assistance to environmental professionals across the state. We deliver training on campus, online, and onsite to meet the needs of operators and their facilities. Our programs are developed to provide operators with access to the latest technologies and educational services in the water and wastewater industry. Our staff works with utilities, municipalities, and industry to explore, develop, and deliver training that prepares operators for state certification examinations, opportunities to maintain continuing education requirements, and programs to enhance the skills of operators.

#### **Table of Contents**

#### **Contact Information**

Central Carolina Technical College, SCETC 853 Broad Street Sumter, South Carolina 29150

Mailing address: 506 North Guignard Drive Sumter, South Carolina 29150-2468 Phone: 803.778.6656

> Fax: 803.774.6995 Email: etc@cctech.edu Website: www.cctech.edu



#### **Registration Information**

#### 4 easy ways to register:

1. **MAIL** the completed registration form to:

Central Carolina Technical College, SCETC 506 N. Guignard Dr. Sumter, SC 29150

Please include credit card information or a check payable to Central Carolina Technical College.

- 2. **FAX** your registration form, with the credit card portion of the registration form completed, to **SCETC**: 803-774-6995
- HAND DELIVER your registration form to a staff member at: SCETC in the AMTTC at 853 Broad Street, Sumter, SC 29150 Central Carolina Technical College in Sumter
- EMAIL your registration form to etc@cctech.edu.
   Print a registration form at: http://www.cctech.edu

**Enrollment Information** - Course registrations are taken on a "first-come, first-served" basis. Class sizes are limited, and it is recommended that students register at least one month in advance. Courses with low enrollment are subject to cancellation prior to class start date. In the event of cancellation, students will be notified and the tuition refunded.

- Payment must accompany registration.
- When using a credit card for payment, registration forms may be faxed or emailed: please include card expiration date and security code. If card is declined, alternate form of payment is necessary; STUDENT IS NOT REGISTERED UNTIL PAYMENT IS RECEIVED.
- Registration form <u>MUST</u> include student's date of birth.
- Certificates will be given for each course; duplicates may be purchased for \$10 each.

Confirmation or receipt available upon request.

Call 803-778-6656 or email etc@cctech.edu

It is the policy of the Central Carolina Technical College not to sell or otherwise distribute course materials outside the venue of controlled courses. Materials are copyrighted and all rights are reserved.



## Central Carolina Technical College and the South Carolina Environmental Training Center Registration Form

Mail: Central Carolina Technical College SC Environmental Training Center 506 N. Guignard Drive - Sumter, SC 29150

| Name   |
|--|
| Course Name  |
| Course Date  |
| Course Cost Online: [ ] YES [ ] NO   |
| Short School Level (Circle One) A B C D E (Water & Wastewater Operators Only)  |
| Date of BirthLast 4 digits of Social Security  |
| (required) (requested)  Sex: [ ] M [ ] F US Citizen: [ ] YES [ ] NO  Ethnicity: [ ] African American [ ] American Indian [ ] Asian [ ] Hispanic [ ] White  |
| Work Phone Cell Phone  |
| I authorize CCTC to text me about any registration, billing, or scheduling issues. [ ] Yes [ ] No Service provider name Text message rates may apply.  |
| Mailing Address  |
| City County  |
| StateZip   |
| Company Name   |
| Email Address  |
| Payment Information: [ ] Check (Payable To: Central Carolina Technical College) [ ] Credit Card (Circle One) VISA MC AE  |
| I,hereby authorize CCTC to charge the  |
| credit card listed below according to the terms outlined above. This payment authorization is for the training/services described above, for the amount indicated above only, and is valid for one time use only. I certify that I am an authorized user of this credit card and that I will not dispute the payment with the credit card company; so long as the transaction corresponds to the terms indicated in this form.   |
| <b>Refunds:</b> A full refund will be issued for all courses, seminars, and workshops canceled by Central Carolina Technical College. Registrations canceled before the cutoff date, ten (10) working days before the scheduled training, will be assessed a 20% administrative fee. There will be no refund for a cancellation less than ten (10) working days prior to the start date. Refunds may be requested by mail, email, in person, or by telephone. These requests are the responsibility of the registrant. |
| Confirmation or receipt available upon request. Call 803-778-6656 or email etc@cctech.edu  |
|  |
| Credit Card #  |
| Name On Card   |
| Card Exp Security Code #   |
| Card Billing Address   |

#### **Online Water & Wastewater COURSES**

#### **Short Schools:**

**Advanced and Basic Short Schools** 

P/C Wastewater
 Biological Wastewater
 Water Treatment
 Wastewater
 28 hours - \$499
 Water Treatment

Water Distribution
 28 hours - \$499 (Basic), \$399 (Advanced)

Online training is designed to mirror the face-to-face short schools, and provide students with the tools necessary to enhance operating skills and prepare for the state certification exam. Glossary, crossword puzzles, slide presentations, and quizzes will enhance the learning experience. Students will have direct communication with a personal instructor to help answer questions. Short Schools are intensive training sessions designed as a comprehensive overview for operators of water and wastewater treatment facilities who are preparing for the state certification exam. ABC Need-to-Know criteria for operators are used as the topical outline for each Short School, and the Sacramento Manual is used as the reference text. Tuition includes manual. Course must be completed to earn CEUs — partial credit is not awarded. Students are allowed up to 12 weeks to complete the course.

#### 12-Hour Reviews

- P/C Wastewater
- Biological Wastewater
- Water Treatment
- Water Distribution

Work at your own pace while sharpening your operating skills. These courses include glossaries, videos, visual aids, and practice quizzes. Students will have direct communication with a personal instructor to help answer questions. Review courses are intended for water and wastewater operators desiring to earn 12 hours of continuing education credit to maintain their water and/or wastewater operator certification and who are not preparing for the state certification exam. Course must be completed to earn CEUs — partial credit is not awarded. Students are allowed up to 4 weeks to complete the course. Course fee is \$299.

#### 6-Hour Reviews

- 6-hour Wastewater Review
- 6-hour Water Review

These courses are designed to supplement the continuing education requirements for water / wastewater operators and increase the basic skills that will assist operators in their daily activities at treatment facilities. The courses include: dealing with support systems, unit process control

and other core competency material. Students will have direct communication with a personal instructor to help answer questions. Course must be completed to earn CEUs — partial credit is not awarded. The Wastewater Review course meets ABC's continuing education requirements for approved course topic criteria for biological and PC. The Water Review course meets ABC's continuing education requirements for approved course topic criteria for water treatment and water distribution. Students are allowed up to 2 weeks to complete the course. Course fee is \$199.

#### Basic Math for Operators: 12-hour Review

This introductory math course is beneficial for water and wastewater operators who are preparing for a basic level state certification exam or for operators who desire a refresher course in mathematics. The course involves practicing basic math calculations that apply to treatment facilities. Course topics include addition, subtraction, multiplication, division, fractions, decimal equivalents, conversions, formulas, units of measure, word problems, and calculating dosages. This course meets ABC's continuing education requirements for approved course topic criteria for water treatment, water distribution, biological, PC, and well driller. Course must be completed to earn CEUs — partial credit is not awarded. Students are allowed up to 4 weeks to complete the course. Course fee is \$399.

#### **Advanced Math for Operators: 12-hour Review**

This advanced math course is beneficial for water and wastewater operators who are preparing for an advanced level state certification exam or for operators who desire a refresher course in mathematics. The course involves learning advanced math calculations that apply to treatment facilities. Course topics include a general math review and problems related to coagulation, chemical feeders, clarification, chlorination, fluoride, filtration, hydraulics, motors, pumps, and flow rates. This course meets ABC's continuing education requirements for approved course topic criteria for water treatment, water distribution, biological, PC, and well driller. Course must be completed to earn CEUs — partial credit is not awarded. Students are allowed up to 4 weeks to complete the course. Course fee is \$399.

#### Pool & Spa - CPO Operator: 10-hours

This course is designed for persons responsible for operating or managing swimming pools and spas. Topics include: South Carolina Rules and Regulations, legal requirements, water requirements, water chemistry, filtration and circulation, disinfection techniques, water testing, troubleshooting, problem prevention, and safety. Students will have direct communication with a personal instructor to help answer questions. Tuition includes the Certified Pool-Spa Operator Handbook from the National Swimming Pool Foundation. Course must be completed to earn CEUs — partial credit is not awarded. Students are allowed up to 4 weeks to complete the course. Course fee is \$250.

#### **Apprenticeships for the Water Industry**

*These utilities have discovered the benefits of apprenticeship programs:* 

























#### The Benefits

The benefits of a customized registered apprenticeship program can be substantial.

- Increased productivity
- Better retention
- Decreased turnover
- Higher morale
- Enhanced employee loyalty
- · Increased skill levels



The South Carolina Environmental Certification Board has stated that apprenticeship programs incorporating the ABC's Need-to-Know criteria may be eligible to advance operators to higher levels of licensure more quickly.

#### Earn One Year of Work Experience Toward your Operator License

#### Water & Wastewater Operator Certificate

Central Carolina Technical College offers an ONLINE Water and a Wastewater Operator Certificate program to help operators gain a better understanding of water or wastewater treatment operations and to provide an opportunity for employees to receive a higher level of certification more quickly. These Certificates provide students with work-ready skills and as an avenue for on-going specialized training with access to the latest technologies and educational services in the water and wastewater fields. Training includes an overview of state and federal regulations, industrial safety, emergency response, hazardous waste and treatment issues with an emphasis on operations.

- All of the courses are offered ONLINE.
- Financial aid is available to eligible students.
- · Certificate can be completed in one year.
- The SC Environmental Certification Board (LLR) has approved the Certificates to count as one year of work experience toward a higher certification level (after trainee year).
- All of the courses are transferable into the Environmental Engineering Technology Associate Degree program at Central Carolina Technical College.

If you have any questions; please call or email: Josh Castleberry at 803-778-6601 or castleberryjs@cctech.edu

#### **Fall Courses:**

EVT 206 - Introduction to Environmental Compliance and

EVT 254 - Industrial Safety & Emergency Response

#### **Spring Courses:**

EVT 255 - Solid & Hazardous Waste and

EVT 102 - Basic Water Treatment (Water Certificate) or

EVT 108 - Basic Physical/Chemical Wastewater (Wastewater Certificate)

#### **Summer Courses:**

EVT 110 - Introduction to Treatment Facilities and

EVT 103 - Basic Water Distribution (Water Certificate) or

EVT 109 - Basic Biological Wastewater (Wastewater Certificate)

# **DEGREE**Opportunities

# Associate Degree in Environmental Engineering Technology

Students in the Environmental Engineering Technology program at Central Carolina Technical College explore dynamic environmental principles including; ecology, energy, resources, waste management, air, water, wastewater, and soil pollution. Students also determine strategies for effectively minimizing or preventing waste in order to reduce the impact on the environment; discuss innovative solutions to environmental issues; and look at ways to improve processes and protect people as they work with hazardous and toxic chemicals. Fundamental principles and concepts of laboratory applications, operations of water and wastewater treatment facilities, environmental regulations, pollution prevention, waste disposal strategies and many other environmental issues are studied in the program. Most importantly, students acquire skills and knowledge they can adapt to a variety of environmental, health, and safety career opportunities.

\*This program is primarily an online program with a required experiential learning component. Some hybrid classes require on-site participation.



#### **Short School Description**

Short Schools are intensive training sessions designed as a comprehensive overview for operators of water and wastewater treatment facilities who are preparing for the state certification exam. ABC Need-to-Know criteria for operators are used as the topical outline for each Short School, and Sacramento Manuals are used as reference texts. Handouts, videos, demonstrations and practice tests are utilized in the training program.

#### **Book Requirements for Short Schools**

Sacramento Manuals are reference texts for all Short Schools, as well as one reference for the South Carolina state certification exams. Manuals are included in the tuition for "D" level Physical/Chemical Wastewater, Biological Wastewater, Water Distribution and the "E" level Water Treatment courses. Manuals are also provided for the "B" level Physical/Chemical Wastewater, Biological Wastewater, and Water Treatment courses. Students are asked to bring the manuals for all other level courses. Additional manuals are available for purchase through the SCETC. Call (803) 778-6656. Please bring a calculator to class.

#### **Review Course Description**

Review courses are intended for water and wastewater operators desiring to earn continuing education credit to maintain their operator certification and who are not preparing for the state certification exam. Please bring a calculator to class.

#### **Online Course Description**

Online training is designed to mirror face-to-face courses and provide participants with the tools necessary to enhance operating skills and prepare for the certification exam (Short Schools) or gain continuing education credit (Reviews). Glossaries, crossword puzzles, slide presentations, and quizzes enhance the learning experience. Students will have direct communication with their personal instructor to help answer questions. All levels of Short Schools and Reviews are available for online training. See page 4 for additional information.

#### Water/Wastewater

#### 2020 Course Schedule

#### **Biological Wastewater Treatment Short Schools**

| \$499 | MTWR | Feb. 3-6, 2020   | 8:30-4:30 | (28 hrs.) | D |
|-------|------|------------------|-----------|-----------|---|
| \$399 | MTWR | Feb. 3-6, 2020   | 8:30-4:30 | (28 hrs.) | C |
| \$499 | MTWR | Feb. 17-20, 2020 | 8:30-4:30 | (28 hrs.) | В |
| \$399 | MTWR | Feb. 17-20, 2020 | 8:30-4:30 | (28 hrs.) | Α |
| \$499 | MTWR | June 1-4, 2020   | 8:30-4:30 | (28 hrs.) | D |
| \$399 | MTWR | June 1-4, 2020   | 8:30-4:30 | (28 hrs.) | C |
| \$499 | MTWR | June 15-18, 2020 | 8:30-4:30 | (28 hrs.) | В |
| \$399 | MTWR | June 15-18, 2020 | 8:30-4:30 | (28 hrs.) | Α |
| \$499 | MTWR | Oct. 12-15, 2020 | 8:30-4:30 | (28 hrs.) | D |
| \$399 | MTWR | Oct. 12-15, 2020 | 8:30-4:30 | (28 hrs.) | C |
| \$499 | MTWR | Oct. 19-22, 2020 | 8:30-4:30 | (28 hrs.) | В |
| \$399 | MTWR | Oct. 19-22, 2020 | 8:30-4:30 | (28 hrs.) | Α |

#### **Biological Wastewater Reviews**

| \$299 | WR | June 24-25, 2020 | 8:30-3:30 | (12 hrs.) |
|-------|----|------------------|-----------|-----------|
| \$299 | MT | Oct. 26-27, 2020 | 8:30-3:30 | (12 hrs.) |

#### **Biological Wastewater Online Courses**

Online courses are scheduled weekly; see page 4 for additional information.

|       | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |           |
|-------|---|-----------|
| \$499 | Basic Short School                      | (28 hrs.) |
| \$499 | Advanced Short School                   | (28 hrs.) |
| \$299 | Review                                  | (12 hrs.) |
| \$199 | 6 hr Review for Wastewater Operators    | (6 hrs.)  |

#### **Physical/Chemical Wastewater Short Schools**

| /     | ,    |                   |           |           |   |
|-------|------|-------------------|-----------|-----------|---|
| \$499 | MTWR | Jan. 13-16, 2020  | 8:30-4:30 | (28 hrs.) | D |
| \$399 | MTWR | Jan. 13-16, 2020  | 8:30-4:30 | (28 hrs.) | C |
| \$499 | MTWR | Jan. 27-30, 2020  | 8:30-4:30 | (28 hrs.) | В |
| \$399 | MTWR | Jan. 27-30, 2020  | 8:30-4:30 | (28 hrs.) | Α |
| \$499 | MTWR | May 4-7, 2020     | 8:30-4:30 | (28 hrs.) | D |
| \$399 | MTWR | May 4-7, 2020     | 8:30-4:30 | (28 hrs.) | C |
| \$499 | MTWR | May 18-21, 2020   | 8:30-4:30 | (28 hrs.) | В |
| \$399 | MTWR | May 18-21, 2020   | 8:30-4:30 | (28 hrs.) | Α |
| \$499 | MTWR | Sept. 14-17, 2020 | 8:30-4:30 | (28 hrs.) | D |
| \$399 | MTWR | Sept. 14-17, 2020 | 8:30-4:30 | (28 hrs.) | C |
| \$499 | MTWR | Sept. 21-24, 2020 | 8:30-4:30 | (28 hrs.) | В |
| \$399 | MTWR | Sept. 21-24, 2020 | 8:30-4:30 | (28 hrs.) | Α |

#### **Physical/Chemical Wastewater Reviews**

| \$299 | WR | May 27-28, 2020   | 8:30-3:30 | (12 hrs.) |
|-------|----|-------------------|-----------|-----------|
| \$299 | TW | Sept. 29-30, 2020 | 8:30-3:30 | (12 hrs.) |

#### **Physical/Chemical Wastewater Online Courses**

Online courses are scheduled weekly; see page 4 for additional information. \$499 Basic Short School (28 hrs.)

| \$499 | Advanced Short School                | (28 hrs.) |
|-------|--------------------------------------|-----------|
| \$299 | Review                               | (12 hrs.) |
| \$199 | 6 hr Review for Wastewater Operators | (6 hrs.)  |

#### **Water Distribution Short Schools**

| \$499 | MTWR | April 6-9, 2020   | 8:30-4:30 | (28 hrs.) | D |
|-------|------|-------------------|-----------|-----------|---|
| \$399 | MTWR | April 6-9, 2020   | 8:30-4:30 | (28 hrs.) | C |
| \$399 | MTWR | April 27-30, 2020 | 8:30-4:30 | (28 hrs.) | В |
| \$399 | MTWR | April 27-30, 2020 | 8:30-4:30 | (28 hrs.) | Α |
| \$499 | MTWR | Aug. 3-6, 2020    | 8:30-4:30 | (28 hrs.) | D |
| \$399 | MTWR | Aug. 3-6, 2020    | 8:30-4:30 | (28 hrs.) | C |
| \$399 | MTWR | Nov. 9-12, 2020   | 8:30-4:30 | (28 hrs.) | В |
| \$399 | MTWR | Nov. 9-12, 2020   | 8:30-4:30 | (28 hrs.) | Α |
| \$499 | MTWR | Dec. 7-10, 2020   | 8:30-4:30 | (28 hrs.) | D |
| \$399 | MTWR | Dec. 7-10, 2020   | 8:30-4:30 | (28 hrs.) | C |
|       |      |                   |           |           |   |

#### **Water Distribution Reviews**

\$299 TW Nov. 17-18, 2020 8:30-3:30 (12 hrs.)

#### **Water Distribution Online Courses**

Online courses are scheduled weekly; see page 4 for additional information.

| \$499 | Basic Short School              | (28 hrs.) |
|-------|---------------------------------|-----------|
| \$399 | Advanced Short School           | (28 hrs.) |
| \$299 | Review                          | (12 hrs.) |
| \$199 | 6 hr Review for Water Operators | (6 hrs.)  |

#### **Water Treatment Short Schools**

| \$499 | MTWR | March 2-5, 2020   | 8:30-4:30 | (28 hrs.) | Ε |
|-------|------|-------------------|-----------|-----------|---|
| \$399 | MTWR | March 2-5, 2020   | 8:30-4:30 | (28 hrs.) | D |
| \$399 | MTWR | March 2-5, 2020   | 8:30-4:30 | (28 hrs.) | C |
| \$499 | MTWR | March 23-26, 2020 | 8:30-4:30 | (28 hrs.) | В |
| \$399 | MTWR | March 23-26, 2020 | 8:30-4:30 | (28 hrs.) | Α |
| \$499 | MTWR | Aug. 24-27, 2020  | 8:30-4:30 | (28 hrs.) | E |
| \$399 | MTWR | Aug. 24-27, 2020  | 8:30-4:30 | (28 hrs.) | D |
| \$399 | MTWR | Aug. 24-27, 2020  | 8:30-4:30 | (28 hrs.) | C |
| \$499 | MTWR | Oct. 5-8, 2020    | 8:30-4:30 | (28 hrs.) | В |
| \$399 | MTWR | Oct. 5-8, 2020    | 8:30-4:30 | (28 hrs.) | Α |
| \$499 | MTWR | Nov. 2-5, 2020    | 8:30-4:30 | (28 hrs.) | Ε |
| \$399 | MTWR | Nov. 2-5, 2020    | 8:30-4:30 | (28 hrs.) | D |
| \$399 | MTWR | Nov. 2-5, 2020    | 8:30-4:30 | (28 hrs.) | C |
|       |      |                   |           |           |   |

#### **Water Treatment Reviews**

\$299 WR Dec. 2-3, 2020 8:30-3:30 (12 hrs.)

#### **Water Treatment Online Courses**

Online courses are scheduled weekly; see page 4 for additional information.

| • • • • • • |                                 |           |
|-------------|---------------------------------|-----------|
| \$499       | Basic Short School              | (28 hrs.) |
| \$499       | Advanced Short School           | (28 hrs.) |
| \$299       | Review                          | (12 hrs.) |
| \$199       | 6 hr Review for Water Operators | (6 hrs.)  |

#### CCTC's Student to Operator PathWAY

CENTRAL CAROLINA TECHNICAL COLLEGE



#### YOUTH APPRENTICESHIPS FOR HIGH SCHOOL STUDENTS

The South Carolina Environmental Training Center recognizes the need to recruit young people into the industry. South Carolina is experiencing a shortage of licensed water and wastewater professionals. This shortage will develop into a crisis if action is not taken immediately to recruit younger operators.

#### What is PathWAY?

This is a unique program for high school students to learn more about the water and wastewater industry and gain hands-on experience before they graduate. Central Carolina Technical College's PathWAY - Water Apprenticeships for Youth - combines college credit courses and an opportunity for high school students to work at a local utility and be registered in a US Department of Labor Youth Apprenticeship program.

Water and wastewater dual enrollment programs at CCTC are an opportunity for high school students to take online college courses and high school courses at the same time. The college credits could count toward both high school graduation and college.

Youth Apprenticeships are registered through the Department of Labor and are a rigorous program for high school students that combine job related education with mentored on-the-job learning.

#### High schools students will:

- Enroll in CCTC's Operator Certificate dual enrollment program
- Be registered as a Plant Operator Youth Apprentice
- Work at a local utility for hands-on experience

#### Local utility will:

- Pay students for their work
- Mentor the student
- Be responsible for on-the-job training
- SC Environmental Training Center will:
- Sponsor the apprenticeship through the USDOL
- Cover the student's insurance
- Be responsible for job related education
- Work with students and utilities to ensure program value

For more information, contact: Elizabeth Williams at 803.778.7873 or williamsel@cctech.edu

## **Maintenance for Operators**

These courses can be offered at your facility. Call 803-778-6656 or email etc@cctech.edu for more information.

#### **Electrical Maintenance**

June 19, 2020 8:30-3:30 (6 hrs.)

The course will cover the electrical fundamentals for wastewater operators. Topics may include; atomic theory & energy sources, electric circuit basics, electromagnetism, inductance, & capacitance, power systems, control system components, reading electrical diagrams, electrical measurements, normal operations and troubleshooting. This course meets ABC's continuing education requirements for approved course topic criteria for water treatment, water distribution, biological, PC, and well driller.

#### **Pump Maintenance**

\$250 June 26, 2020 8:30-3:30 (6 hrs.)

The course will cover an overview of pump theory, types, components, and repair. Other topics may include a review of selection & replacement of packing and mechanical seals, pump piping system, pump hydraulics, normal operating conditions, lineshaft turbine operating conditions, special pumping units, and abnormal operating conditions. This course meets ABC's continuing education requirements for approved course topic criteria for water treatment, water distribution, biological, PC, and well driller.

# Math for Operators These courses can be offered at your facility. Call 803-778-6656 or email etc@cctech.edu

for more information.

#### Math for Operators - 6 hours

April 1, 2020

This 6-hour math course is beneficial for water and wastewater operators. The course involves practicing math calculations that apply to treatment facilities. Course topics include a basic math review, decimal equivalents, conversions, formulas, units of measure, word problems, and calculating dosages. This course meets ABC's continuing education requirements for approved course topic criteria for water treatment, water distribution, biological, PC, and well driller. Call the SCETC at 803-778-6656 if you would like to schedule this course at your facility.

#### Math for Operators – 12 hours

April 1-2, 2020 WTh 8:30-3:30 (12 hrs.)

This 12-hour math course is beneficial for water and wastewater operators. The course involves practicing math calculations that apply to treatment facilities. Course topics include a basic math review, decimal equivalents, conversions, formulas, units of measure, word problems, and calculating dosages. Other course topics may include problems related to coagulation, chemical feeders, clarification, chlorination, fluoride, filtration, hydraulics, motors, pumps, and flow rates. This course meets ABC's continuing education requirements for approved course topic criteria for water treatment, water distribution, biological, PC, and well driller. Call the SCETC at 803-778-6656 if you would like to schedule this course at your facility.

### **Safety Courses**

These courses can be offered at your facility. Call 803-778-6656 or email etc@cctech.edu for more information.

#### 8-Hr. HAZWOPER Refresher

\$299 May 11, 2020 8:30-5:30 (8 hrs.) \$299 November 16, 2020 8:30-5:30

This course provides an awareness level for employees who may witness or discover a hazardous waste release. This course covers the OSHA mandated 8 hours of annual refresher training for 24 hour and 40 hour HAZWOPER. Topics include: legal overview,

properties and identification of hazardous materials, protective equipment, use of instrumentation, and incident planning. This course can also be delivered onsite at your facility. Dates and times can be scheduled at your convenience. Call 803-778-6656 for additional information.

#### 24-Hr. HAZWOPER

\$550 MTW May 11-13, 2020 8:30-5:30 (24 hrs.)

This three-day course is designed for employees who respond to a hazardous waste release for the purpose of protecting property, persons, or the nearby environment, but is not responsible for stopping or cleaning up the release. Topics include: legal overview, properties of hazardous materials, use of respiratory protection and personal protective equipment, spill remediation, and decontamination techniques, and a dressout field exercise. This course meets the OSHA 29 CFR 1910.120 training requirements. The 24-hour HAZWOPER certification requires an 8 hour annual refresher. This course can also be delivered onsite at your facility. Dates and times can be scheduled at your convenience. Call 803-778-6656 for additional information.

#### 40-Hr. HAZWOPER

\$699 M-F May 11-15, 2020 8:30-5:30 (40 hrs.)

This five-day course is designed for persons who respond to a hazardous waste release to stop the release. The program includes intensive classroom and practical dress-out spill/ cleanup exercises. Legal overview of regulations, basic toxicology, site characterization and analysis, monitoring equipment, spill mitigation, drum over-pack and repair, and full dress field exercises are included. This course meets the OSHA 29 CFR 1910.120 training requirements. The 40 hour HAZWOPER certification requires an 8 hour annual refresher. This course can also be delivered onsite at your facility. Dates and times can be scheduled at your convenience. Call 803-778-6656 for additional information.

#### **Confined Space Entry**

June 11, 2020 8:30-3:30

This course is designed to meet the OSHA (29 CFR 1910 146) requirements for training of persons who must enter and work in confined spaces. This course defines a confined space, explains confined space hazards and preparations for entering. This program stresses the importance of safety awareness and hazard evaluation control. Permits will be written and entries will be performed in our confined space simulator. This course meets ABC's continuing education requirements for approved course topic criteria for water treatment, water distribution, biological, and PC. This course can be customized and delivered onsite at your facility. Dates and times can be scheduled at vour convenience. Call 803-778-6656 for additional information.

#### **Confined Space Entry and Rescue**

June 11-12, 2020 8:30-3:30 (12 hrs.)

This course is designed to meet the OSHA (29 CFR 1910 146) requirement for training of persons who must enter and work in confined spaces. This course defines a confined space, explains confined space hazards, preparations for entering, and procedures for performing rescues from confined spaces. This program stresses the importance of safety awareness and hazard evaluation and control. Permits will be written, and actual entries will be performed in our confined space simulator. This course meets ABC's continuing education requirements for approved course topic criteria for water treatment, water distribution, biological, and PC. This course can be customized and delivered onsite at your facility. Dates and times can be scheduled at your convenience. Call 803-778-6656 for additional information.

#### **Trenching & Shoring Competent Person Training**

\$150 April 23, 2020 8:30-3:30 (6 hrs.)

This course will help reduce the risk of excavation-site accidents. The dangers of trenching and shoring and the responsibilities of a "competent person" will be discussed. Other topics include soil classification, protective support systems, general safety practices, and emergency response procedures. This course meets ABC's continuing education requirements for approved course topic criteria for water distribution. This course can be customized and delivered onsite at your facility. Dates and times can be scheduled at your convenience. Call 803-778-6656 for additional information.

#### **Chlorine Safety**

This course offers specialized training in the handling of chlorine cylinders. Students will learn the hazards associated with chlorine and how to find and repair leaks. Students will also gain hands-on experience with the level A & B repair kit. This course meets ABC's continuing education requirements for approved course topic criteria for water treatment, water distribution, biological, and PC. Call the SCETC at 803-778-6656 for the next start date or to schedule this course at your facility.

#### **OSHA 10-Hour General Industry**

This 10-hour OSHA course covers the role and function of OSHA, and methods of compliance based on the General Industry Standards. This course includes Occupational Safety and Health Act required material and topics that directly relate to the water/wastewater industry. Topics include: confined space, electrical hazards, hazardous communication, lockout/tagout, bloodborne pathogens, and personal protective equipment. It is recommended this course be taken every three years to receive updated information from OSHA. This course can be delivered onsite at your facility. Dates and times can be scheduled at your convenience.

#### **OSHA 30-Hour General Industry**

This 30-hour OSHA course covers the role and function of OSHA, and methods of compliance based on the General Industry Standards. This course includes Occupational Safety and Health Act required material and topics that directly relate to the water/wastewater industry. Topics include: confined space, chlorine safety, electrical hazards, hazardous communication, lockout/tagout, bloodborne pathogens, and personal protective equipment. It is recommended this course be taken every three years to receive updated information from OSHA. This course can be delivered onsite at your facility. Dates and times can be scheduled at your convenience.

#### HAZMAT-RCRA-DOT

This 8-hour course covers loading & unloading, storing, transporting, packaging, labeling, marking, placarding, manifesting and emergency preparedness to accidents involving hazardous materials This course meets the DOT renewal requirement as listed in 49 CFR 172 (must be renewed every three years) and the annual RCRA renewal requirement. This course can be delivered onsite at your facility. Dates and times can be scheduled at your convenience. Call 803-778-6656 for additional information.

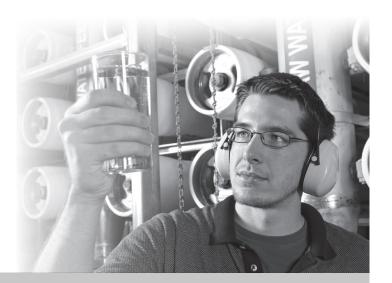
#### **HAZMAT-RCRA**

This 4-hour course will cover the labeling & marking shipments, placarding, packaging, and manifesting of hazardous materials. This course meets the DOT renewal requirement as listed in 49 CFR 172 (must be renewed every three years) and the annual RCRA renewal requirement. This course can be delivered onsite at your facility. Dates and times can be scheduled at your convenience. Call 803-778-6656 for additional information.

#### **Well Driller Courses**

Between July 1, 2019 and June 30, 2021, every South Carolina well driller must obtain twelve (clock hours) continuing education units or pass an exam of the next highest level. Well drillers should keep records of all courses attended. When you receive your renewal form in 2021, there will be a space to record the number of hours you have received. Continuing education can be obtained from schools, workshops, seminars, conferences, online training, and/or in-house training sessions. For more information, visit the SC Environmental Certification Board website at http://www.llr.sc.gov/env/ A number of our courses meet approved course topic criteria for well drillers.

- Electrical Maintenance 6 hours (see page 8)
- Pump Maintenance 6 hours (See page 8)
- Basic Math (online & classroom) 6 or 12 hours (See page 4 & 8)
- Advanced Math (online & classroom) 6 or 12 hours (See page 4 & 8)



#### **Customized Training at Your Facility**

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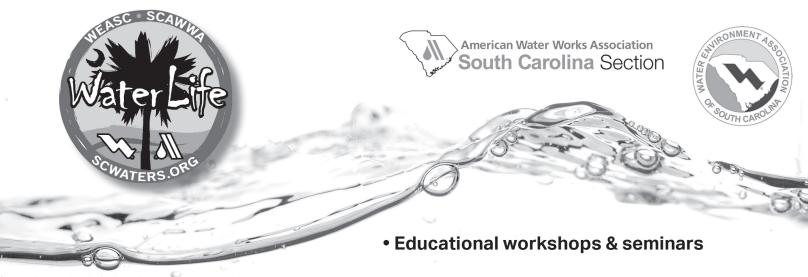
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#### **Environmental Certification Board**

The South Carolina Department of Labor, Licensing and Regulation (LLR) recommend the South Carolina Environmental Training Center (SCETC) for training to help prepare operators for state certification exams and continuing education units for water and wastewater training.

Operators are required to obtain at least 12 hours of continuing education over a two-year period or take and pass an exam. This period begins on July 1st of an odd year and ends June 30th two year later — also an odd year. Operators may use the same hours to cover more than one certification if the subject is relevant to both/all areas. Operators must maintain their own records for continuing education credit. Visit LLR's website for additional information. http://www.llr.sc.gov/env/

#### **Operator Exam Information**

The Association of Boards of Certification (ABC) offers standardized and client-customized certification exams. South Carolina exams include the categories of water treatment, water distribution, biological wastewater and physical/chemical wastewater. ABC offers valuable examination resources for operators preparing for an exam. Visit ABC's website to learn more about the following resources. http://www.abccert.org/

- Formula Sheets ABC Formula/Conversion Tables are provided during the examination and should be used to solve exam calculations.
- Sample Exam Questions Get a feel for the exam with these sample

questions. While you will not find questions directly from an exam, they will help you familiarize yourself with a certification exam.

- Need-to-Know Criteria Need-to-Know Criteria describe the core competencies covered on the ABC standardized exams and are a valuable preparation tool.
- Computerized Examination Help View the features of the computerized exam software.

Before an operator is allowed to sit for a Biological Wastewater, Physical/ Chemical Wastewater, Water Distribution, Water Treatment, Bottled Water or Well Driller examination they must be approved by the South Carolina Environmental Certification Board. Applications for operator certification are available on LLR's website.

The South Carolina environmental certification examinations are administered by Applied Measurement Professionals (AMP) Assessment Centers. The exams are given on a computer at over 150 locations throughout the United State. In South Carolina, exam facilities are located in Columbia, Spartanburg, Greenville, Beaufort, Myrtle Beach and Charleston. A current listing of AMP Assessment Centers, including addresses and driving directions, may be viewed at the AMP's website located at www.goAMP.com. The examinations are administered by appointment only; Monday through Saturday at 9:00 a.m. and 1:30 p.m. Candidates are scheduled on a first-come, first-served basis. To register for an exam go to www.goAMP.com or call 1-800-345-6559.

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